INDEX.

Abrams, Duff A.

Discussion, 40, 126, 140, 155, 196.

Aggregate.

An Interesting Case of Dangerous Aggregate. J. C. Pearson and G. F. Loughlin, 142.

Inundation Methods for Measurement of Sand for Making Concrete. G. A. Smith and W. A. Slater.

Premixed Aggregate Tests. J. G. Ahlers, 114.

Question Box, 269.

Ahlers, J. G.

Report on Field Tests and Methods Used in Building Construction to Obtain Concrete of Specified Strength, 114.

Discussion, 26, 125-28, 268, 269.

Alkali.

Report of Committee E-6, on Destructive Agents and Protective Treatments, 301.

Allen, Leslie H.

Discussion, 271, 272, 273, 274, 275, 277, 278, 279, 281, 282, 283.

Anderson, W. P.

Discussion, 24, 25.

Ashton, Ernest.

Discussion, 268, 414.

Barneskan, Henry.

Discussion, 271, 272, 275.

Beggs, George Erle.

Design of Electric Structures from Paper Models, 53.

Discussion, 140.

Bekay, A. V.
Discussion, 25.

Bent, E. F.
Discussion, 414.

Bertin, R. L.
Discussion, 241, 250.

Bliss, J. J.
Discussion, 414, 415, 418.

Block.
See **Concrete Block and Tile.**

Bloecher, Walter P.
An Analysis of the Variables in Concrete from the Construction Standpoint, 100.
Discussion, 268.

Bosch, J.
Discussion, 414.

Breed, H. Eltinge.
Trends of Highway Design, 133.
Discussion, 140.

Brick.
Tentative Standard Specifications for Concrete Brick, 382.

Building Laws.
Question Box, 257.

Buildings.
Notes on a Severe Formwork Fire. A. R. Lord, 27.
Some Defects in Concrete Buildings. H. D. Loring, 20.

Campion, H. T.
Franklin Field Stadium of the University of Pennsylvania, 215.

Catlett, Richard H.
Discussion, 259.

Chace, W. G.
Reinforced-Concrete Pipe for Transmission of Water Under Pressure, 67.
Discussion, 256, 260.

Cinder Roof Fill.
Question Box, 249.

Cohen, A. R.
Discussion, 463.

Committees.
Rules Governing Standing Committees, 518.

Concrete Behavior.
Report of Committee E-6, on Destructive Agents and Protective Treatments, 301.

Concrete, Block and Tile.
Tentative Standard Specifications for Concrete Building Block and Concrete Building Tile, 384.

Concrete Products.
Report of Committee P-1, on Standard Building Units, 376.

Consistency.
Question Box, 261.

Contracting.
Report of Committee C-1, on Contractors' Plant, 360.

Culverts.
Report of Committee J-2, Joint Concrete Culvert Pipe Committee, 292.

Davis, H. A.
Discussion, 262, 378, 418.

Design.
Design of Elastic Structures from Paper Models. G. E. Beggs, 53.
A New Method of Constructing Reinforced-Concrete Water Tanks, W. S. Hewett, 41.
Some Defects in Concrete Buildings. H. D. Loring, 20.

Earley, J. J.
Building the "Fountain of Time," 185.

Ege, C. R.
Discussion, 140.

Estimating.
Method of Estimating the Cost of Concrete Work, F. R. Walker, 156.
Separate Group Meeting, 277.

Ewing, Davis.
Discussion, 414.

Ferguson, John A.
Discussion, 24, 25, 39, 111, 249, 250.

Fires.
Notes on a Severe Formwork Fire. A. R. Lord, 27.
Report of Committee P-5, on Fire Resistance of Concrete Building Units, 331.

Floors.
Question Box, 266.
Tentative Standard Specifications for Concrete Floors, 489.

Freeman, M. H.
Discussion, 127, 128.

Freeman, P. J.
Discussion, 39, 40, 111.

Gaston, H. F.
Discussion, 418.

Ginder, J. W.
Methods of Measurement, 162.

Gonnerman, H. F.
Discussion, 250.

Gould, H. J.
Discussion, 280, 281.

Hanley, H. W.
Discussion, 279.

Harris, W. R.
Discussion, 378; 381, 415, 418, 419.

Hatt, W. K.
Discussion, 141.

Havlik, Robert F.
Developments in Surface Treated Concrete, 75.
Discussion, 379.

Hewett, W. S.
A New Method of Constructing Reinforced-Concrete Water Tanks, 41.

Hollister, S. C.
Discussion, 126, 259, 380, 381.

Houses.
Thoughts in Concrete Houses. J. C. Pearson, 167.

Howe, H. N.
Discussion, 126.

Hughes, E. E.
Discussion, 401.

Humphrey, Richard L.
Discussion, 127.

Hutchinson, G. W.
Correction Data for Comparative Tests Results from Field Specimens, 191.

Iggberg, F. W.
Discussion, 272, 274.

Inundation Methods for Measurements of Sand in Making Concrete.
G. A. Smith and W. A. Slater, 222.

Irwin, A. C.
Discussion, 128.

Johnson, Nathan C.
Discussion, 244.

Lengst, G. J.
Discussion, 415.

Lindau, A. E.
Discussion, 140.

Loney, N. M.
Discussion, 39, 266, 277, 318.

Lord, A. R.
Notes on a Severe Formwork Fire, 29.
Discussion, 39, 40, 257.

Loring, H. D.
Some Defects in Concrete Buildings—Their Causes and How to Minimize by Proper Design, 20.
Discussion, 249.

Loughlin, G. F. and Pearson, J. C.
An Interesting Case of Dangerous Aggregate, 142.
Discussion, 155.

Lowell, J. W.
Discussion, 379, 417, 419.

McMillan, F. R.
Discussion, 125, 126, 257.

Measurement.
Methods of Estimating the Cost of Concrete Work. F. R. Walker, 156.
Methods of Measurement. J. W. Ginder, 162.
Separate Group Meeting, 277.

Mixing.
Inundation Methods for Measurement of Sand for Making Concrete. G. A. Smith and W. A. Slater.
Question Box, 250, 268.

Morris, Clyde T.
Design and Construction of Stadiums, 198.

Nichols, C. E.
Discussion, 278.

Nomenclature.
Report of Committee G-4, on Nomenclature, 319.

Pavements.
Tentative Standard Specifications for Portland Cement Concrete Pavements, 387.

Pearson, J. C. and Loughlin, G. F.
An Interesting Case of Dangerous Aggregate, 142.
Thoughs in Concrete Houses, 167.

Pipe.
Reinforced-Concrete Pipe for Transmission of Water Under Pressure. W. G. Chace, 67.
Report of Committee J-2, Joint Concrete Culvert Pipe Committee, 292.

Products.
Quality Control in Concrete Products Plants. S. Walker, 88.
Report of Committee C-6, on Concrete Product Plant Operation, 403.

Richart, F. E.
Discussion, 66, 113.

Roads.
Design and Construction Lincoln Highway. W. G. Thompson, 129.
Trends of Highway Design. H. Eltinge Breed, 133.

Rusting Reinforcement.
Question Box, 263.

Schulz, H. H.
Discussion, 417, 418.

Schweller, A. C., Jr.
Discussion, 249.

Sea Water.
Report of Committee E-6, on Destructive Agents and Protective Treatments, 301.

Slag.
Question Box, 250.

Sewers.
Report of Committee S-3, 428.
Tentative Standard Specifications for Monolithic Concrete Sewers, etc., 429.

Shertzer, T. B.
Discussion, 463.

Smith, G. A. and Stater, W. A.
Inundation Methods for Measurement of Sand in Making Concrete. Discussion, 261.

Slater, W. A. and Smith, G. A.
Inundation Methods for Measurement of Sand in Making Concrete.

Specifications.
Concrete Brick, 382.
Concrete Building Block and Concrete Building Tile, 384.
Concrete Floors, 489.
Concrete Oil Fuel Tanks, 420.
Concrete Sewers, 429.
Portland Cement Concrete Pavements, 387.
Regulations Governing the Form But Not the Substance of Standards, 286.
Stucco, 471.
Surface Treatment, 464.

Spiker, W. C.
Discussion, 26, 265, 318.

Stadiums.
Design and Construction of Stadiums. Clyde T. Morris, 198.
Franklin Field Stadium of the University of Pennsylvania. H. T. Campion, 215.
University of Kansas Stadium. C. C. Williams, 218.

Standpipes.
See **Tanks.**

Stucco.
See **Surface Treatment.**

Surface Treatment.
Developments in Surface Treated Concrete. R. F. Havlik, 75.
Report of Committee C-3, on Treatment of Concrete Surfaces, 462.
Standard Recommended Practice for Portland Cement Stucco, 471.
Tentative Standard Recommended Practice for Exterior Treatment, 464.

Taft, Lorado.
A New Art of Concrete, 178.

Tanks.
A New Method of Constructing Reinforced-Concrete Water Tanks. W. S. Hewitt, 41.
Tentative Recommended Practice and Standard Specifications for Concrete Fuel Oil Tanks, 420.

Tests.
An Analysis of the Variables in Concrete from the Construction Standpoint. W. P. Bloecher, 100.
Correction Data from Comparative Test Results from Field Specimens. G. W. Hutchinson, 191.
Inundation Methods for Measurement of Sand for Making Concrete. G. A. Smith and W. A. Slater.
Question Box, 261.
Report of Committee P-5. Results of Fire Tests in Concrete Blocks, 331.
Report on Field Tests. J. G. Ahlers, 114.

Thompson, W. G.
Design and Construction Features of Ideal Section of Lincoln Highway, 129.

Tile.
See **Concrete Block and Tile.**
Group Meeting on Building Tile, 271.

Turner, J. A.
Discussion, 39.

Upson, M. M.

Discussion, 112, 263, 318.

Walker, Frank R.

Methods of Estimating the Cost of Concrete Work, 156.
Discussion, 281.

Walker, Stanton.

Quality Control in Concrete Products Plants, 88.
Report to Committee on Nomenclature on Definitions, 329.
Discussion, 245.

Wason, L. C.

Discussion, 249.

Waterproofing.

Question Box, 259.
Report of Committee E-7, on Waterproofing, 294.

Watkins, M. G.

Discussion, 275.

Williams, C. C.

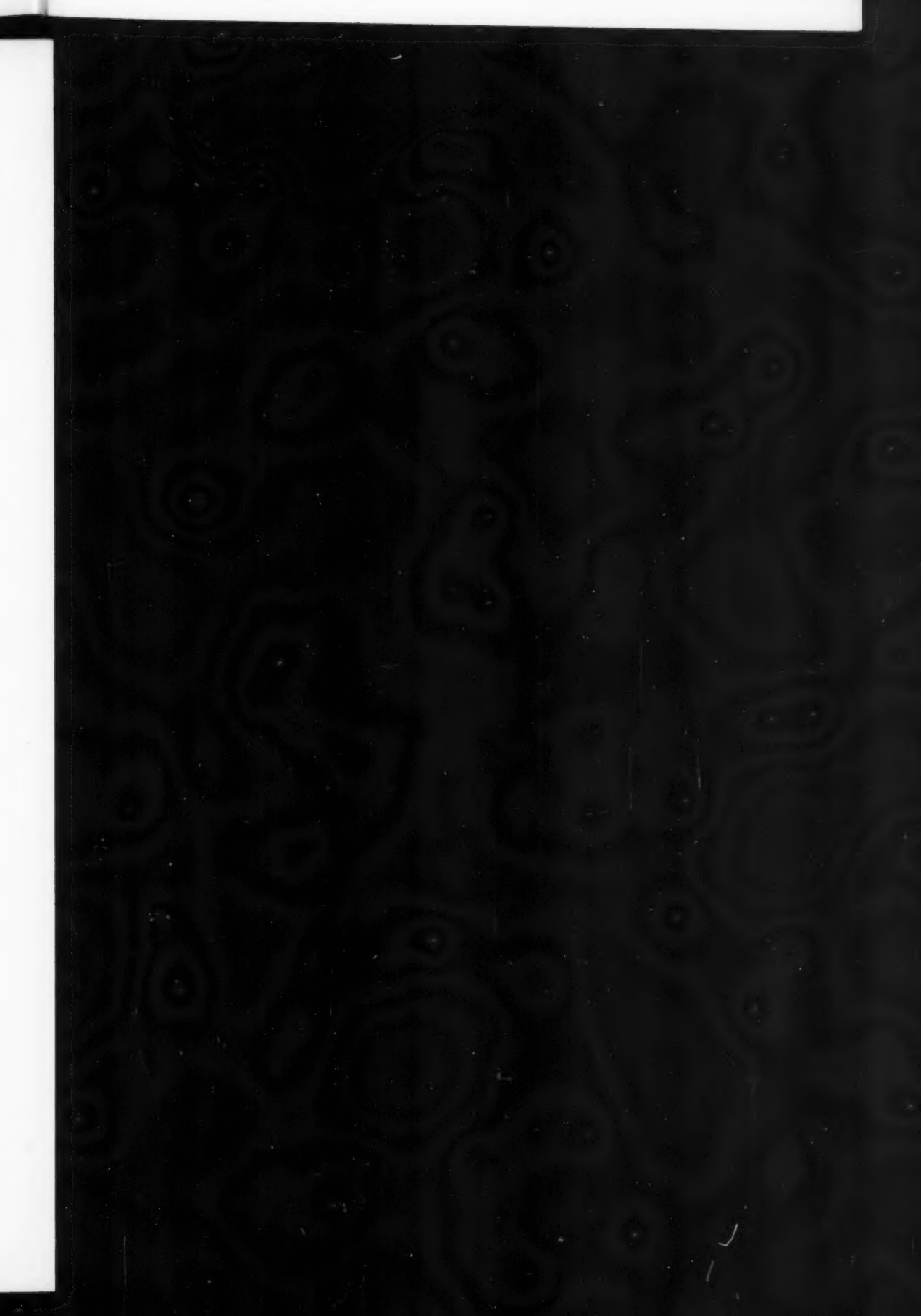
University of Kansas Stadium, 218.

Wilson, I. P.

Discussion, 419.

Woolson, Ira H.

Discussion, 40, 140, 275.

Young, R. B.

Discussion, 113, 263.